

Message

From: Rao, Kate [Rao.kate@epa.gov]
Sent: 5/20/2021 6:09:46 PM
To: Ho, Yenhung [Ho.Yenhung@epa.gov]
Subject: RE: [EXT] RE: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Sorry I missed this email. I am free most of today. Let me know when you want to talk.

Kate Rao
Groundwater Protection Section (WTR 4-2)
USEPA Region 9
75 Hawthorne Street, San Francisco, CA 94105
tel: (415) 972-3533 / fax: (415) 947-3549

From: Ho, Yenhung <Ho.Yenhung@epa.gov>
Sent: Wednesday, May 19, 2021 9:38 AM
To: Rao, Kate <Rao.kate@epa.gov>
Subject: RE: [EXT] RE: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Thanks, Kate. May I call you this afternoon about 3:30ish?

From: Rao, Kate <Rao.kate@epa.gov>
Sent: Wednesday, May 19, 2021 6:36 AM
To: Ho, Yenhung <Ho.Yenhung@epa.gov>
Subject: FW: [EXT] RE: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Hi Calvin.

Please see Shari's response to the LOE for the 3/8 TDM.

Let's chat about this today when you have time.

Thanks. Kate

Kate Rao
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From: Shari Ring <Shari.Ring@cadmusgroup.com>

Sent: Wednesday, May 19, 2021 3:47 AM

To: Rao, Kate <Rao.kate@epa.gov>

Subject: RE: [EXT] RE: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Hi Kate,

Correct -- writing the permit from a template was fairly straightforward and took few hours.

We also needed to review their lengthy response and confirm that we had a definitive list of pre-operational testing activities and objectives based on all prior work. We took care to be thorough since this is the last chance we have at input prior to authorizing construction (and to avoid another round with the applicant).

Other things we did per the TD and as outgrowths of conversations include: some research to address CalGEM's concerns about subsidence and speaking to Calvin, David, and HQ about the stimulation plan.

We used 101 hours in March and April, so I assume almost all of that is per the TD. My understanding is this TD is complete, correct?

Let me know if you need anything else.

From: Rao, Kate <Rao.kate@epa.gov>

Sent: Tuesday, May 18, 2021 7:11 PM

To: Shari Ring <Shari.Ring@cadmusgroup.com>

Subject: [EXT] RE: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

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Hi Shari.

Just wondering how much LOE you have burned on this TDM. We estimated 100 but it's my understanding that to date most of the work has been around template language and the meat of the review and permits/terms conditions will come shortly when CES submits a new permit application.

Thanks. Kate

Kate Rao

Groundwater Protection Section (WTR 4-2)

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From: Rao, Kate

Sent: Monday, March 8, 2021 4:24 PM

To: Shari.Ring@cadmusgroup.com

Cc: Albright, David <Albright.David@epa.gov>; Ho, Yenhung <Ho.Yenhung@epa.gov>

Subject: Contract No. EP-C-15-022, WA No. 5-90, R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Hi Shari.

Below is a new work initiation request for CES. This TDM is for (1) a technical analysis report evaluating CES's Mar 5 responses to EPA technical comments and (2) a draft permit terms/conditions for the Class VI UIC permit. We are asking for the deliverables 6 weeks from the Kick-Off call. Please work directly with Calvin to set up the Kick-off call meeting.

Please let me know if you have any questions.

Thanks. Kate

Contract No. EP-C-15-022, Workplan Assignment No. 5-90

R9 Tech Support for Implementation of the UIC Program – Clean Energy Systems - Class VI UIC Permit Application # R9UIC-CA6-FY20-1 [Task 1; Subtask 1.2 – Technical Review Analysis]

Technical Direction

Background: On February 5, 2021, EPA provided CES with technical evaluation comments on its responses to EPA's previous technical evaluation comments and information requests #1-4. On March 5, 2021, CES provided responses to EPA's comments.

Action: Under Task 1, SubTask 1.2, review and provide an **evaluation of the CES's Mar 5 responses**. If the responses do not provide sufficient information, please provide evaluation and discussion under this technical review TDM.

Based on information available in CES permit application and its responses to EPA's technical evaluation comments and information requests, **draft permit conditions** in accordance to the contents and attachments of EPA Class VI regional permit template. The draft permit conditions must ensure that construction and operation of the proposed Class VI well will comply with all relevant Safe Drinking Water Act regulations at 40 CFR 124, 144, 146, 147, and 148 and protect public health and underground sources of drinking water.

Deliverable: Provide **(1) a technical analysis report evaluating CES's Mar 5 responses to EPA technical comments**. The report should include an itemized list of additional information necessary to clarify, modify, or supplement the permit application material, and **(2) a draft permit terms/conditions for the Class VI UIC permit**. Deliverable should be emailed in WORD to Kate Rao and Calvin Ho.

Estimated LOE for evaluating CES Responses: 100 hours

Schedule: 6 weeks from the Kick-off call/confirmation of TDM.

Kick-off Call: Cadmus to set up a call once TDM is received.

Material to Review:

- CES's Mar 5 Responses to EPA Technical Review Comments (attached)
- EPA Class VI Regional Permit Template (attached)

Kate Rao

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